



06 15 .06

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: van Rooijen et al.

Serial No.: 10/032,201

Filed: December 19, 2001

For: METHODS FOR THE PRODUCTION OF  
MULTIMERIC PROTEINS, AND  
RELATED COMPOSITIONS

CONFIRMATION NO: 4943

Art Unit: Unassigned

Examiner: Unassigned

CERTIFICATE OF MAILING BY "EXPRESS MAIL"

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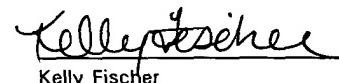
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Date

  
Kelly Fischer

### TRANSMITTAL LETTER

Commissioner for Patents  
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Dear Sir:

Responsive to the Notice to Comply With Requirements For Patent Applications Containing Nucleotide Sequence and/or Amino Acid Sequence Disclosures, mailed May 8, 2002, the following documents are transmitted herewith: a copy of the Notice to Comply and Sequence Listing Error Report, a Response to the Notice to Comply, paper and disk copies of the Substitute Sequence Listing, and a Verified Statement that the paper and computer readable copies of the Substitute Sequence Listing are the same.

- The Commissioner is hereby authorized to charge any fee, including any submitted herewith if an attached check(s) is in the wrong amount or otherwise improper or missing, that may be due in connection with this and the attached papers, or with this application during its entire pendency to or to credit any overpayment to Deposit Account No. 50-1213. A duplicate of this sheet is enclosed.

Respectfully submitted,  
HELLER, EHRMAN, WHITE & McAULIFFE LLP

By: 

Stephanie L. Seidman  
Registration No. 33,779

Attorney Docket No. 38814-351B

Address all correspondence to:

HELLER, EHRMAN, WHITE & McAULIFFE LLP  
4350 La Jolla Village Drive, 7th Floor  
San Diego, California 92122-1246  
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email:sseidman@HEWM.com



**UNITED STATES PATENT AND TRADEMARK OFFICE**

COMMISSIONER FOR PATENTS  
UNITED STATES PATENT AND TRADEMARK OFFICE  
WASHINGTON, D.C. 20231  
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APPLICATION NUMBER	FILING/RECEIPT DATE	FIRST NAMED APPLICANT	ATTORNEY DOCKET NUMBER
10/032,201	12/19/2001	Gijs Van Rooijen	38814-351B

Stephanie Seidman  
HELLER EHRLICH WHITE & McAULIFFE LLP  
Suite 700  
4350 La Jolla Village Drive  
San Diego, CA 92122-1246



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**MAY 14 2002**

Heller Ehrman

**FORMALITIES LETTER**



\*OC000000008060526\*

Date Mailed: 05/08/2002

**NOTICE TO COMPLY WITH REQUIREMENTS FOR PATENT APPLICATIONS  
CONTAINING NUCLEOTIDE SEQUENCE AND/OR AMINO ACID SEQUENCE  
DISCLOSURES**

Applicant is given **TWO MONTHS FROM THE DATE OF THIS NOTICE** within which to file the items indicated below to avoid abandonment. Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

- A copy of the "Sequence Listing" in computer readable form has been submitted. However, the content of the computer readable form does not comply with the requirements of 37 C.F.R. 1.822 and/or 1.823, as indicated on the attached copy of the marked -up "Raw Sequence Listing." Applicant must provide a substitute computer readable form (CRF) copy of the "Sequence Listing" and a statement that the content of the sequence listing information recorded in computer readable form is identical to the written (on paper or compact disc) sequence listing and, where applicable, includes no new matter, as required by 37 CFR 1.821(e), 1.821(f), 1.821(g), 1.825(b), or 1.825(d).

**For questions regarding compliance to these requirements, please contact:**

- For Rules Interpretation, call (703) 308-4216
- To Purchase PatentIn Software, call (703) 306-2600
- For PatentIn Software Program Help, call (703) 306-4119 or e-mail at [patin21help@uspto.gov](mailto:patin21help@uspto.gov) or [patin3help@uspto.gov](mailto:patin3help@uspto.gov)

*A copy of this notice **MUST** be returned with the reply.*

*fc*

Customer Service Center

Initial Patent Examination Division (703) 308-1202

PART 2 - COPY TO BE RETURNED WITH RESPONSE

**ATTACHMENT TO "NOTICE TO COMPLY WITH REQUIREMENTS...SEQUENCE DISCLOSURES"**

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be submitted using one of the following methods:

1. Electronically submitted through EFS-Bio  
(<http://www.uspto.gov/ebc/efs/downloads/documents.htm>, EFS Submission User Manual - ePAVE)
2. Mailed to:  
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Box Sequence, P.O. Box 2327  
Arlington, VA 22202
3. Mailed by Federal Express, United Parcel Service or other delivery service to:  
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2011 South Clark Place  
Customer Window, Box Sequence  
Crystal Plaza Two, Lobby, Room 1B03  
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4. Hand Carried directly to the Customer Window at:  
2011 South Clark Place  
Crystal Plaza Two, Lobby, Room 1B03, Box Sequence,  
Arlington, Virginia 22202



BIOTECHNOLOGY  
SYSTEMS  
BRANCH

0425

## RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 10/032,201A  
Source: OIPE  
Date Processed by STIC: 4/24/02

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.  
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1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,  
2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY  
FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.  
PATENTIN 2.1 e-mail help: [patin21help@uspto.gov](mailto:patin21help@uspto.gov) or phone 703-306-4119 (R. Wax)  
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TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 3.1 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

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Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.  
Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.  
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1. EFS-Bio (<http://www.uspto.gov/ebc/efs/downloads/documents.htm>), EFS Submission User Manual - ePAVE)
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OIPE

Does Not Comply  
Corrected Diskette Needed  
See P. 6

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/10/032,201A

DATE: 04/24/2002  
TIME: 10:57:50

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3 <110> APPLICANT: Van Rooijen, Gijs  
4 Deckers, Harm  
5 Heifetz, Peter Bernard  
6 Briggs, Steven  
7 Dalmia, Bipin Kumar  
8 Del Val, Greg  
9 Zaplachinski, Steve  
10 Moloney, Maurice  
12 <120> TITLE OF INVENTION: METHODS FOR THE PRODUCTION OF MULTIMERIC PROTEINS, AND  
ELATED  
13 COMPOSITIONS  
15 <130> FILE REFERENCE: 38814-351B  
17 <140> CURRENT APPLICATION NUMBER: 10/032,201A  
--> 18 <141> CURRENT FILING DATE: 2002-04-09  
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PATENT APPLICATION: US/10/032,201A

DATE: 04/24/2002  
TIME: 10:57:50

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127 tataggcaag ccatcactgc tgcaggaact gggtgcatgg cagcttggta tgcagagcät 960  
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171 ggc cca gcg gca cac acg gcg gcg att tac gca gct agg gct gaa ctt 96  
172 Gly Pro Ala Ala His Thr Ala Ala Ile Tyr Ala Ala Arg Ala Glu Leu  
173 20 25 30  
175 aaa cct ctt ctc ttc gaa gga tgg atg gct aac gac atc gct ccc ggt 144  
176 Lys Pro Leu Leu Phe Glu Gly Trp Met Ala Asn Asp Ile Ala Pro Gly  
177 35 40 45  
179 ggt caa cta aca acc acc acc gac gtc gag aat ttc ccc gga ttt cca 192  
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191	ttc	tct	tcg	aaa	ccg	ttt	aag	cta	ttc	aca	gat	tca	aaa	gcc	att	ctc	336
192	Phe	Ser	Ser	Lys	Pro	Phe	Lys	Leu	Phe	Thr	Asp	Ser	Lys	Ala	Ile	Leu	
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195	gct	gac	gct	gtg	att	ctc	gct	act	gga	gct	gtg	gct	aag	cgg	ctt	agc	384
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203	tcc	gct	tgt	gct	ttt	tgc	gac	gga	gct	gct	ccg	ata	ttc	cgt	aac	aaa	480
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212	Phe	Leu	Thr	Lys	Tyr	Gly	Ser	Lys	Val	Tyr	Ile	Ile	His	Arg	Arg	Asp	
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216	Ala	Phe	Arg	Ala	Ser	Lys	Ile	Met	Gln	Gln	Arg	Ala	Leu	Ser	Asn	Pro	
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219	aag	att	gat	gtg	att	tgg	aac	tcg	tct	gtt	gtg	gaa	gct	tat	gga	gat	672
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236	Asp	Gly	Tyr	Val	Val	Thr	Lys	Pro	Gly	Thr	Thr	Gln	Thr	Ser	Val	Pro	
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240	Gly	Val	Phe	Ala	Ala	Gly	Asp	Val	Gln	Asp	Lys	Lys	Tyr	Arg	Gln	Ala	
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243	atc	act	gct	gca	gga	act	ggg	tgc	atg	gca	gct	ttg	gat	gca	gag	cat	960
244	Ile	Thr	Ala	Ala	Gly	Thr	Gly	Cys	Met	Ala	Ala	Leu	Asp	Ala	Glu	His	
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271 65 70 75 80  
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293 245 250 255  
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301 305 310 315 320

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PATENT APPLICATION: US/10/032,201A

DATE: 04/24/2002  
TIME: 10:57:51

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Output Set: N:\CRF3\04242002\J032201A.raw

Please Note:

se of n and/or Xaa have been detected in the Sequence Listing. Please review the sequence Listing to ensure that a corresponding explanation is presented in the <220> o <223> fields of each sequence which presents at least one n or Xaa.

eq#:101; Xaa Pos. 16,17,38,42,45,54,55,58,66,72,75,79,80,81,94,99,103  
eq#:109; Xaa Pos. 17,38,42,55,58,60,72,107  
eq#:134; Xaa Pos. 21,35  
eq#:245; Xaa Pos. 33,45,46  
eq#:275; Xaa Pos. 9,11  
eq#:287; Xaa Pos. 524  
eq#:288; Xaa Pos. 666  
eq#:290; Xaa Pos. 523  
eq#:293; Xaa Pos. 520  
eq#:294; Xaa Pos. 578  
eq#:295; Xaa Pos. 523  
eq#:296; Xaa Pos. 576  
eq#:300; Xaa Pos. 612  
eq#:303; Xaa Pos. 523  
eq#:304; Xaa Pos. 527  
eq#:307; Xaa Pos. 497  
eq#:309; Xaa Pos. 497  
eq#:312; Xaa Pos. 525  
eq#:313; Xaa Pos. 498

se of <220> Feature(NEW RULES):

quence(s) are missing the <220> Feature and associated headings.  
se of <220> to <223> is MANDATORY if <213> ORGANISM is "Artificial Sequence"  
r"Unknown". Please explain source of genetic material in <220> to <223>  
ection (See "Federal Register," 6/01/98, Vol. 63, No. 104, pp.29631-32)  
Sec.1.823 of new Rules)

eq#:10<sup>16</sup> 17,18,19,22,24,27,30,33,34,35

Input Set : A:\351bseq.002  
Output Set: N:\CRF3\04242002\J032201A.raw

:18 M:271 C: Current Filing Date differs, Replaced Current Filing Date  
:162 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
:166 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:10  
:538 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
:541 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:16  
:544 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:16  
:680 M:258 W: Mandatory Feature missing, <220> FEATURE:  
:680 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:  
:704 M:258 W: Mandatory Feature missing, <220> FEATURE:  
:704 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:  
:737 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
:740 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:19  
:743 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:19  
:856 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:19  
:945 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
:948 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:22  
:1151 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:24  
:1434 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!  
:1437 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:27  
:1440 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:27  
:1729 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:30  
:2066 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:33  
:2297 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:34  
:2330 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:35  
:2334 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:35  
:2340 M:258 W: Mandatory Feature missing, <220> not found for SEQ ID#:35  
:4706 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:101 after pos.:0  
:4708 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:101 after pos.:16  
:4710 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:101 after pos.:32  
:4712 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:101 after pos.:48  
:4714 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:101 after pos.:64  
:4716 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:101 after pos.:80  
:4718 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:101 after pos.:96  
:4895 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:109 after pos.:16  
:4897 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:109 after pos.:32  
:4899 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:109 after pos.:48  
:4901 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:109 after pos.:64  
:4905 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:109 after pos.:96  
:5488 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:134 after pos.:16  
:5490 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:134 after pos.:32  
:9690 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:245 after pos.:32  
:11041 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:275 after pos.:0  
:11598 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:287 after pos.:512  
:11695 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:288 after pos.:656  
:11848 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:290 after pos.:512  
:12071 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:293 after pos.:512  
:12158 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:294 after pos.:576  
:12237 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:295 after pos.:512

**VERIFICATION SUMMARY**  
PATENT APPLICATION: US/10/032,201A

DATE: 04/24/2002  
TIME: 10:57:51

Input Set : A:\351bseq.002  
Output Set: N:\CRF3\04242002\J032201A.raw

:12322 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:296 after pos.:560  
:12637 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:300 after pos.:608  
:12850 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:303 after pos.:512  
:12929 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:304 after pos.:512  
:13152 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:307 after pos.:496  
:13259 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:309 after pos.:496  
:13418 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:312 after pos.:512  
:13495 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:313 after pos.:496